



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,967	12/16/2005	Shousei Yoshida	M1909.1139	1666
32172 7590 10/10/2008 DICKSTEIN SHAPIRO LLP 1177 AVENUE OF THE AMERICAS (6TH AVENUE) NEW YORK, NY 10036-2714				
EXAMINER				
DAO, MINH D				
ART UNIT		PAPER NUMBER		
2618				
MAIL DATE		DELIVERY MODE		
10/10/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Response to Arguments

1. Regarding claim 1, applicant argues that the examiner's conclusion of obviousness is based upon improper hindsight reasoning. It must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

2. In response to Applicant's arguments that Kobayashi shows a method for calculating an array weight directly using a directional constraint vector and a covariance matrix, which is shown in Figure 8B and Step 206 in Figure 9. This method corresponds to the known directional constraint minimum power (DCMP) algorithm. On the other hand, the independent claims utilize adaptive update algorithms, in which directional constraint processing is performed on an array weight calculated by minimum mean squared error (MMSE) control which is taught by Ishida. Applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

3. In response to applicant's admitting that the combination of Tanaka, Kobayakawa, and Ishida meets the limitations of claim 1, but argued that there is no suggestion to combine the references. The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, as previously stated, the reason for combining the teaching of Ishida and Kobayakawa is to implement the MMSE method to update the antenna weight in place of the directional constraint minimum power (DCMP) algorithm of Kobayakawa in order for the base station to correctly separate and extract a signal sent from each mobile station as taught by Ishida.

4. Claims 1-8 remain rejected for the stated above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MINH D. DAO whose telephone number is (571)272-7851. The examiner can normally be reached on 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MATTHEW ANDERSON can be reached on 571-272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MINH DAO
/MINH D DAO/
Examiner, Art Unit 2618